



The Latest Scams Circulating the Consumer World.



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## DEBIT AND CREDIT CARD INSECURITY

### The Hook

An Individual recently reported that his credit card had been hacked to the tune of approximately \$4,200 from somewhere in France. But, how can this have been done since the card never left his wallet?

Without knowing whether the credit card had a magnetic strip on the back, or an embedded chip (known as “Chip and PIN”) it is not possible to ascertain how the fraudsters accomplished this attack. But suffice it to say, it caused us to investigate the latest in the ongoing saga of credit and debit card fraud. According to Claes Bell from Bankrate.com, “The whole purpose of security is to make it more difficult so thieves will go somewhere else as well as eliminating amateurs. Still no matter what you develop, there's going to be someone who's going to find a way around it.”



### The Whole Story

A recent BBC news documentary entitled **Chip and PIN ‘security risk’** provided us with an update on the supposed superiority of the embedded chips that replace the magnetic strip on credit and debit cards issued by European Banks. These embedded chips were hailed as being far superior to the magnetic strips because the coded information was much harder to copy, basically requiring that your card be stolen and your PIN number known by the thief. According to the BBC report, that is no longer the case. Their news report relates that computer scientists at Cambridge University have found a way to hack credit and debit cards so easily that they believe the card issuers will have to revamp the whole “Chip and PIN” system thought relatively invulnerable.

The fraud requires your card to be physically stolen and a fake card be placed in the merchant's PIN reader. The crook would carry a backpack containing a laptop and his own PIN entry device (PED) with the stolen card inserted. The inserted stolen card talks to the fake card which communicates data from the stolen card in the crook's PED, to the merchant's PED. This tells the bank that a signature has authorized the purchase after any four digit PIN has been entered.

Many have complained that US banks and merchants have not yet spent the requisite money (estimated around \$5.5 billion) to convert from the mag strip technology to the harder to copy embedded chip technology. But it sounds like even the “Chip and PIN” technology has its potential flaws according to the BBC news report.

### The Lesson

Giving your credit card information over the internet or phone and using debit cards in stores and restaurants, and now smart phones, is inherently dangerous. Keep track of your credit and debit cards, and immediately report them as lost or stolen. Next, use your credit card for merchant purchases and carefully read your monthly bill before paying your balance. If you notice a charge you don't recognize, immediately report it to the credit card company. This gives you approximately 30 days to catch any fraud.

Debit cards are another matter. **Use caution when making a purchase in stores or restaurants.** The safest way is to go to a bank ATM and get cash to make your purchases. However, if you use your card, always cover your key strokes with your other hand when entering your PIN.